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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/627,905

07/25/2003

Walter Laaser

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EXAMINER

YANG, CLARA I

ART UNIT

PAPER NUMBER

2612

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,905

Applicant(s)

LAASER, WALTER

Examiner

Clara Yang

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 5-8 is/are rejected.
- 7) ☒ Claim(s) 2 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Allowable Subject Matter

2. Claims 2 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Regarding claim 2, the prior art of record fails to teach or suggest an electrical appliance comprising a transponder for (1) communicating with an external remote station via wireless radio transmission, (2) transmitting relevant device data with an operating unit while the operating unit is detached from a housing containing a central computing and control unit, at least one sensor, at least one actuator, and the transponder, and (3) monitoring production control during production of the electrical appliance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al. (US 6,731,201) in view of Ioku (GB 2 265 158 A) and Kim (US 5,285,375).

Referring to claims 1 and 8, Bailey teaches an electrical appliance 100 being a washing machine (see Col. 3, lines 41-45) that comprises (a) at least one sensor for recording and providing at least one operating parameter to a remote host via host 140 (see Col. 1, lines 14-29

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and Col. 3, lines 58-67); (b) a motor (i.e., at least one actuator) for influencing at least one operating parameter of the washing machine (see Col. 4, lines 49-54); (c) communication unit 300 having a radio frequency (RF) transceiver 360, which is a transponder as defined by the applicant on page 9, lines 16-21 and communicates with a remote host (i.e., external remote station) via gateway 140 (see Figs. 2 and 3C; Col. 3, lines 58-67; Col. 4, lines 17-19 and 55-57; Col. 7, lines 66-67; and Col. 8, lines 1-6); (d) appliance controller 201 that controls the washing machine and is coupled to communication unit 300 and at least one sensor in order for the remote host to monitor and control the washing machine (see Fig. 2; Col. 3, lines 62-65; and Col. 4, lines 17-19 and 21-57); (e) a housing (see Fig. 2 and Col. 4, lines 55-61); and (f) user interface 210 (i.e., operating unit) (see Fig. 2 and Col. 4, lines 29-34), wherein RF transceiver 360 is coupled to user interface 210. Bailey fails to teach that the washing machine's user interface 210 (1) is detachable from the washing machine's housing and (2) transmits relevant device data with RF transceiver 360 while user interface 210 is detached from the washing machine's housing.

In an analogous art, Ioku teaches a washing machine 1 that includes (a) at least one sensor that records the washing machine's progress or an abnormal operation (i.e., at least one operating parameter) (see page 2, line 27; page 3, lines 1-12; page 9, lines 10-27; and page 10, lines 1-9); (b) actuators that start or interrupt the washing machine's operation and set the washing machine's water level (i.e., influencing at least one of the washing machine's operating parameters) (see Fig. 9; page 1, lines 20-23; page 6, lines 5-16; and page 10, lines 9-11); (c) light-emitting section 51, light-receiving section 44, and light-receiving section 45 forming a communication unit (see page 7, lines 3-12; page 8, lines 1-14; and page 9, lines 9-19); (d) a central computing and control unit that controls the washing machine and is coupled to at least

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one sensor, at least one actuator, and the communication unit (see page 5, lines 26-27; page 6, lines 1-24; page 7, lines 3-12; page 8, lines 1-22 and 27; page 9, lines 1-19; and page 10, lines 2-11); (e) a housing (see Figs. 1, 2, and 6-8); and (f) transmitter 4 (i.e., operating unit) that is detachably connected to the housing via operation panel 5 (see page 5, lines 9-23; page 8, lines 6-27; page 9, lines 1-27; and page 10, lines 1-9), wherein (g) transmitter 4 and the communication unit are coupled via transmitter 4's light-emitting section 42 and the communication unit's light-receiving section 44 (see page 7, lines 3-7) and transmit relevant device data with each other while transmitter 4 is detached from the housing (see page 7, lines 3-12; page 8, lines 6-22 and 27; page 9, lines 1-4 and 9-27; and page 10, lines 1-13).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bailey's washing machine as taught by Ioku because (1) a user interface 210 that is removable enables a user to control and monitor the washing machine without having to be at the washing machine, thereby improving convenience (see Ioku, page 2, lines 3-10 and 23-26; and page 3, lines 8-12), and (2) a removable user interface 210 that controls the washing machine when attached or detached eliminates the need for controls on the operating unit to be duplicated at the washing machine and avoids becoming lost since the operating unit is kept in the washing machine's mounting section when not in use (see Ioku, page 2, lines 9-10).

Ioku's communication unit, however, includes an infrared (IR) transceiver instead of an RF transceiver for communicating with transmitter 4.

In another analogous art, Kim's washing machine 200, as shown in Fig. 4, includes (a) laundry quantity sensor 4, water level sensor 5, and turbidity sensor 6 that record at least one operating parameter of washing machine 200 (see Col. 3, lines 54-61); (b) a motor that influences

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at least one operating parameter of washing machine 200 (see Col. 3, lines 49-54 and Col. 4, lines 60-65); (c) a communication unit having radio transmitter 9 and radio receiver 10 that form a transceiver (i.e., transponder) (see Col. 3, lines 65-68); (d) microcomputer 1 that controls washing machine 200 and is coupled to the sensors, the motor, radio transmitter 9, and radio receiver 10 (see Col. 3, lines 49-68; Col. 5, lines 10-34; and Col. 6, lines 28-54); (e) a housing (see Fig. 3); and (f) remocon 100 (i.e., an operating unit) (see Col. 4, lines 1-29), wherein washing machine 200's radio transmitter 9 and radio receiver 10 communicate and exchange relevant device data with remocon 100 via RF (see Col. 4, lines 21-28).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bailey and Ioku's washing machine as taught by Kim because RF communication between the washing machine's RF transceiver 360 and user interface 210 when user interface 210 is detached from the washing machine's housing is robust and avoids problems associated with IR signals, such as the need for the operating unit to be in visible range of the washing machine's transceiver, the inability to control washing machine 100 at a distance, or the deterioration of operating unit's IR receiver sensitivity under bright light (see Kim, Col. 1, lines 38-51).

Regarding claim 3, Bailey's washing machine, as modified by Ioku and Kim, communicates with a remote host (i.e., a service station) during operation (see Bailey, Col. 3, lines 62-65 and Col. 4, lines 17-19).

Regarding claim 5, Bailey is silent on appliance controller 201 receiving a software upgrade transmitted by a remote host during operating of the washing machine. Bailey, however, does disclose a remote host optimizing the washing machine's performance by sending commands to control the washing machine to compensate for local conditions at the

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appliance (see Col. 3, lines 62-67 and Col. 4, lines 1-3) downloading new protocols to communications module 300 from the network (see Col. 7, lines 26-31 and Col. 9, lines 52-56). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the washing machine of Bailey, Ioku, and Kim as taught by Bailey such that appliance controller 201 receives a software upgrade transmitted by a remote host during operating of the washing machine because an appliance controller 201's ability to receive software upgrades from a remote host enables the manufacturer to easily provide software upgrades to the washing machines without involving the customers, thereby improving customer service and convenience.

Regarding claim 6, Bailey's user interface 210, as modified by Ioku and Kim, has a status display that provides status information to a user (see Bailey's Fig. 2 and Col. 4, lines 29-34; Ioku's Figs. 4 and 9, page 6, lines 5-24, page 9, lines 19-27, and page 10, lines 1-13; and Kim's Fig. 5, indicating part 24, Col. 4, lines 10-12 and 21-49).

Regarding claim 7, as explained in the previous rejection of claim 1, Bailey's user interface 210, as modified by Ioku and Kim, is a detachable operating and control unit for controlling and monitoring washing machine 100 by a user (see Ioku, page 7, lines 3-12; page 8, lines 6-22 and 27; page 9, lines 1-4 and 9-27; and page 10, lines 1-13).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Edamula (US 4,837,414) teaches an oven with a remote controller (i.e., an operating unit detachably connected to the oven) that is stored in the oven's housing when not in use.

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- Abrams et al. (US 6,587,739) teach an appliance control system that can be accessed and controlled locally and remotely and can communicate with remote sources, such as Internet-based facilities, to obtain information.
- Daum et al. (US 2003/0109938) teach Internet-enabled appliances (e.g., washing machines, refrigerators, dishwashers, etc.) that receive software upgrades from a remote central facility.
- Van der Meulen (US 6,906,617) teaches an intelligent appliance home network, wherein each appliance is detachably connected to a power monitor (i.e., an operating unit detachably) and has a central computing and control unit that receives software upgrades from a remote station via the power monitor.

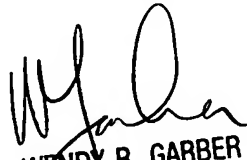
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clara Yang whose telephone number is (571) 272-3062. The examiner can normally be reached on 9:00 AM - 7:30 PM, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CY

1 June 2006


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